

Remarks

The Official Action dated April 20 has been carefully considered. It is believed that this Amendment, taken with the accompanying remarks, establishes the patentability of the claims, placing the present application in condition for allowance. Reconsideration and an early allowance are therefore respectfully requested.

By present Amendment, independent claim 30 has been amended to include the subject matter of original claim 5, which has been cancelled accordingly. Several other claims were amended to correct dependency inconsistencies that resulted from the cancellation of claim 5. As none of these changes involves the addition of new matter, entry is believed to be in order and is therefore respectfully requested.

Applicants acknowledge and appreciate the Examiner's reminder of the effective restriction requirement, and entry of the Amendment dated March 23, 2006.

Claims 3, 4, 6-18 and 30-33 remain pending in the present application and claims 3, 4, 11, 15-18 and 31-33 are currently subject to examination.

35 U.S.C. § 103(a)

Claims 3-5, 11, 15-18 and 30-33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,714,137 to Trinh et al. (Trinh), in view of U.S. Patent No. 5,676,163 to Behan et al. (Behan), and U.S. Patent 5,861,371 to Wilsch-Irrgang et al. (W-I). Specifically, the Examiner asserts that Trinh discloses aqueous, odor absorbing compositions for use on inanimate surfaces, the compositions comprising about 0.1% to about 5% by weight of solubilized, uncomplexed cyclodextrin (CD) and essentially free of any material which would

stain or soil fabric, with a pH greater than about 3. The Examiner further asserts that "suitable" CD are disclosed, and that "cavities should remain uncomplexed," stating that "this can be accomplished through the use of aqueous solvents and appropriate choice of perfume materials." The Examiner asserts that perfume is present up to about 0.5% and that the reference teaches a preferred embodiment wherein at least about 75% of the perfume ingredients should have a Clog P of about 3 or smaller, and that most preferably at least about 75% of the perfume materials should come from the table beginning at the middle of col. 12, and notes that P.T. buccinal, cymal and hexyl cinnamic aldehyde are among these materials. The Examiner teaches that "materials with a Clog P of this magnitude are relatively hydrophobic, having a thousand-fold preference for octanol over water."

The Examiner also draws attention to the disclosure that most preferably, at least about 75% by weight of the perfume material will have molecular weights of about 130 to about 290, polyacrylic acid or polyacrylate may be added, as may soluble zinc salts at about 0.1% to about 10%. The Examiner further asserts that suitable surfactants are disclosed and that water soluble cationic polyamines may be added. The Examiner asserts that the reference differs from the claimed subject matter because it "does not specifically disclose use of a class I or II aldehyde in the recited amounts, or of an odor blocker in the recited amounts.

With respect to the secondary references, the Examiner asserts that Behan teaches that hexyl cinnamic aldehyde, cymal, and P.T. buccinal, all disclosed by Trinh, are class II aldehydes, and that W-I teaches that terpenes, including alpha-terpineol, are useful deodorizers in cleaning compositions. The Examiner also asserts that the "odor blockers and class I and class II aldehydes contemplated for use in these compositions are those disclosed in the cited secondary references." The Examiner concludes that the combination would have been obvious because

the references teach that "all of the ingredients recited by applicants are suitable for inclusion in an odor absorbing composition.

In response to prior argument by Applicants, the Examiner argues that "Trinh does not teach away from perfume ingredients with a ClogP of greater than 3" because Trinh teaches that most preferably, the perfume compositions comprise at least about 75% of materials with a ClogP of 3 or less, such that the Trinh compositions may comprise up to about 25% perfume ingredients with a ClogP of greater than 3. The Examiner further argues that Applicants prior assertions that the perfumes of Trinh are not added in the form of an emulsion or dispersion as they are in the present compositions amounts to "product by process" language that is not afforded patentable weight in the absence of evidence that such a process affords a patentably distinct process. The Examiner notes that the secondary references are being asserted as evidence of common knowledge, that is, to show that certain materials disclosed in Trinh are class I and/or class II aldehydes. This rejection is traversed and reconsideration is respectfully requested.

Instant independent claim 30 (from which the other rejected claims depend) is directed to an odor-absorbing or neutralizing concentrated composition useable as an additive in one or more steps of a laundry process. The composition comprises: solubilized, uncomplexed cyclodextrin; from about 0.0005 to about 1 weight percent of an effective amount of odor blocker; and from about 0.01 to about 1 weight percent of an effective amount of a class I and/or class II aldehyde; and a perfume comprised of perfume ingredients having a ClogP of more than about 3.5. The composition contains at least enough cyclodextrin to provide significant reduction in malodor that survives a typical laundry wash, having a pH of more than about 3. The perfume is hydrophobic and is formed into an emulsion having particles of at least 0.01

micron in diameter before the cyclodextrin is present, using a surfactant material selected from the group consisting of: cyclodextrin compatible surfactants; polymers containing both hydrophobic and hydrophilic portions; and/or cationic fabric softening actives that form stable vesicles in the desired particle size range. The composition is suitable for use as an additive in pre-treating, washing, and/or rinsing of fabrics. The composition is packaged in association with instructions to use it in at least an effective amount in at least one step in a laundry process to counteract malodors that remain after said laundry process.

Significantly, the presently inventive composition comprises both uncomplexed cyclodextrin and perfume ingredients that are either hydrophobic or hydrophilic with a relatively high ClogP. In order to achieve this without typing up the cyclodextrin molecules, which have hydrophobic cavities attractive to such perfume ingredients, the perfume ingredient of the present compositions is added in the form of an emulsion/dispersion (see, e.g. instant specification, page 22, lines 21-29, page 23, lines 11-13). As noted in the specification, formation of the perfume ingredient into these emulsions and dispersions prior to the addition of the CD ingredient is what provides the compatibility of the CD with the perfume ingredient, and represents a novel solution to the inherent incompatibility of these ingredients that typically limits their co-inclusion in compositions wherein the CD cavity must remain uncomplexed in order to function as intended.

The Examiner insists that this limitation does not provided patentably distinguishing weight in the absence of a teaching that it confers a unique property to the composition on the basis of the limitation, over the art. Perhaps Applicants have failed to effectively set forth the teachings of the present specification such that this is clear. First, the presently inventive compositions require the CD to be uncomplexed in the composition, despite the presence of very

hydrophobic perfume ingredients. As disclosed in Trinh, the conventional formulaic manipulation to solving the problem associated with providing solutions that use CD to capture odor molecules and perfume ingredients to mask odors or provide subjective freshening to consumers, is to use predominantly perfumes that do not readily occupy the CD cavity because they are hydrophilic relative to that cavity, and/or perfumes that may occupy the cavity but so weakly that they are readily displaced, and/or perfume ingredients that are too large to fit in the cavity, or some combination of these. This is the motivation in Trinh of preferring perfume molecules of a certain ClogP, which, as the Examiner noted, is a measure of relative hydrophobicity. Applicants admit that Trinh allows for the presence of the entire spectrum of perfume ingredients, but it is clear, as the Examiner has noted, that Trinh manipulates the percentages of perfume ingredients of particular ClogP, in conjunction with size limitations, in order to minimize occupation of the CD.

That the Examiner finds certain perfume ingredients disclosed in Trinh which violate one or another of these parameters is of no moment to the underpinning principle that Trinh seeks to minimize occupation of the CD by co-manipulation of these parameters, rather than according to the formulaic manipulation employed by Applicants. As the Examiner notes, Trinh, utilizes open ended language and does not necessarily prohibit perfume ingredients having a ClogP greater than about 3. But it is clear, as the Examiner also notes, that Trinh teaches a preference for perfume ingredients of a lower ClogP (See, e.g. column 15, lines 37-38: "Thus the perfume ingredients of this invention have logP of about 3 or smaller."), and a preference for perfume ingredients that, regardless of hydrophobicity, are too large to occupy the CD cavity or else have other known repulsions such as quaternary structures that impose steric hindrances that interfere with entry and occupation of the CD cavity.

Trinh fails to teach or suggest the solution of addition of the perfume ingredient as an emulsion/dispersion, and is therefore limited to the inclusion of perfume ingredients having ClogP's which correlate with hydrophilic character, or particular sizes or steric features. Applicants solution to add the perfume ingredient in stable emulsion form prior to the addition of the CD ingredient is, therefore unique, as it enables inclusion of a wider range of perfume ingredients while maximizing the percentage of uncomplexed CD.

Applicants draw attention, in particular, to the Trinh teachings at column 11, lines 45-65, which discloses that Trinh uses a ratio of concentration mechanism to insure suitable availability of uncomplexed cycyclodextrin, rather than separation by phase prior to addition. Hence, this difference between the mechanisms of Trinh and the presently disclosed mechanism is an important functional distinction that results in a patentably distinct odor-absorbing or neutralizing composition.

Further, keeping the perfume ingredient suspended in a stable phase separate from the aqueous phase of the CD serves another important purpose that distinguishes the present inventive compositions. The focus of the malodor control of the present invention is odor that lingers beyond the laundering step, that is, those odors that survive "washing" (e.g. column 1, paragraph 3). In this situation, there is a need for compositions which provide longer-lasting odor control capability, necessitating the inclusion of at least partially hydrophobic perfumes. Trinh, on the other hand, seeks immediate control of odor and therefore is unconcerned with how to maintain hydrophobic perfumes in the composition, as hydrophilic perfumes are suitably and easily employed. Even when Trinh discloses embodiments desiring "more intense" perfume effects, Trinh merely cautions against providing perfume ingredients in too high a ratio such that an ineffective level of CD remains (column 11, lines 45-65).

The secondary references do not cure the deficiency in Trinh with respect to the requisite perfume ingredient. The Applicants understand, and the Examiner notes, that the secondary references are being asserted for definitional or illustrative purposes, as to what compounds are included in certain categories of compounds presently recited. The Examiner asserts that Trinh is intended to stand on its own with respect to combinative purposes, and therefore no motivation to combine is needed. Hence, Applicants will focus the argument accordingly and ignore motivations for purposes of this response. However, Applicants respectfully request clarification as to whether this §103 rejection is on the basis of Trinh alone, in view of knowledge readily available to one of ordinary skill in the art as evidenced by Behan and W-I, or whether Behan and W-I should be viewed as proper §103 secondary references.

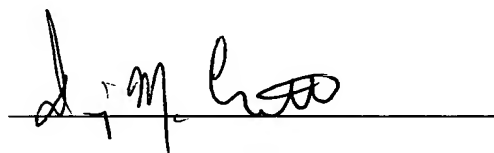
To establish prima facie obviousness of the claimed invention, all the claim limitations must be taught or suggested by the prior art, *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). Trinh fails to disclose compositions comprising both uncomplexed cyclodextrin and perfume ingredients having ClogP more than about 3.5, wherein the perfume ingredient is formed into an emulsion having particles of at least 0.01 micron in diameter before the CD is present. Trinh controls the complexation of CD using ratios and chemical attributes of the perfume ingredient, rather than the presently required phase separation of the CD and perfume components via employment of emulsion/dispersion technology with respect to the perfume ingredient. The asserted secondary references, Behan and W-I appear inapposite to the obviousness or patentability question, but are, according to the Examiner, set forth to evidence the identification of certain compounds disclosed by Trinh as within categories presently disclosed, and Applicants do not take issue with these identifications. Hence, instant

independent claim 30 is nonobvious and patently distinguishable over Trinh, in view of Behan and W-I.

Dependent claims are nonobvious under §103 if the independent claims from which they depend are nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ 2d 1596 (Fed. Cir. 1988). Hence, the rejection under 35 U.S.C. § 103 of independent claim 30, and claims 3-4, 11, 15-18 and 31-33, dependent therefrom, has been overcome. Reconsideration is respectfully requested.

It is believed that the above is a complete and comprehensive response to the rejections under 35 U.S.C. § 103 as asserted in the April 20, 2006 Office Action. Reconsideration and an early allowance are therefore respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "D. M. Everett", is written over a horizontal line.

Denise M. Everett (Reg. No. 47,552)
DINSMORE & SHOHL LLP
1900 Chemed Center
255 East Fifth Street
Cincinnati, Ohio 45202
(513) 977-8787